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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/940,034	08/27/2001	Mikhail Boroditsky	ATT-027PUS	4894

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DALY, CROWLEY & MOFFORD, LLP
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CANTON, MA 02021-2310

EXAMINER

PAYNE, DAVID C

ART UNIT PAPER NUMBER

2633

DATE MAILED: 06/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/940,034

Applicant(s)

BORODITSKY ET AL.

Examiner

David C. Payne

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-7, and 10-17 is/are rejected.
- 7) ☒ Claim(s) 2, 3, 8 and 9 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

1. Claims 1-17 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-26 of copending Application No. 09/940020 (referred to hereinafter as '020). Although the conflicting claims are not identical, they are not patentably distinct from each other because the instant application is drawn to a wavelength stacking control admission system that reserves time slots on an optical channel using tunable lasers. The '020 application is drawn to a wavelength stacking system time-slot allocation system as well. While the '020 application does not claim tunable lasers it would have been obvious to one of ordinary skill in the art at the time of invention to use tunable lasers to adjust to the various predetermined wavelengths of the system rather than using fixed lasers for each wavelength.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 4-7 and 12 are rejected under 35 U.S.C. 102(e) as being anticipated by Tomioka US 5,452,115 A (Tomioka).

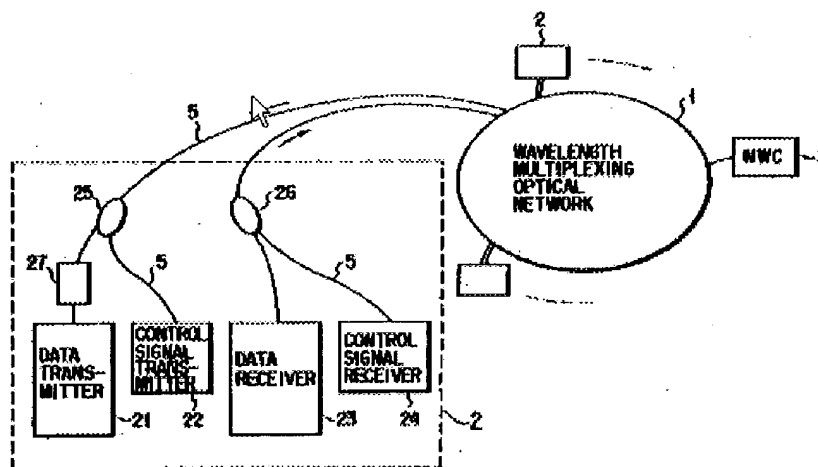


FIG. 5

Re claim 1 Tomioka disclosed,

An optical packet-switched ring network (1 of Figure 5), comprising: a node including an optical switch (27 of Figure 5) coupled to a fiber of the ring network; a transmit switch (22 of Figure 5) coupled to the optical switch; a wavelength stacking assembly coupled to the transmit switch (); a receive switch coupled to the optical switch (21 of Figure 5); and a wavelength unstacking assembly coupled to the receive switch (e.g., col./line: 16/7-22).

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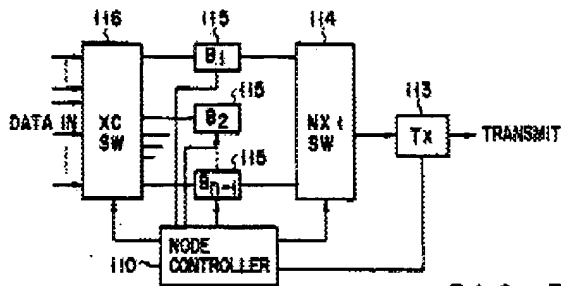


FIG. 35

Re claims 4, 7 Tomioka disclosed,

A method for transmitting and receiving stacked packets on a ring network comprising: stacking packets of varying wavelengths (Figure 3) to form a composite transmit data packet; buffering the transmit data packet in a transmit switch (Bx of Figure 35); transmitting the transmit data packet onto the ring network via an optical switch; receiving a receive data packet via the optical switch; buffering the receive data packet in a receive switch (Bx of Figure 35); and unstacking the receive data packet (e.g., col./line: 16/7-22).

Re claims 5 Tomioka disclosed, wherein the node performs a credit-based MAC protocol (e.g., col./line: 13/15-35).

Re claims 6 Tomioka disclosed, wherein the node further includes an admission controller for determining whether bandwidth requests are accepted based upon available frame capacity (e.g., col./line: 13/15-35).

Re claim 12 Tomioka disclosed,

A method for making decisions when to transmit and receive data packets, comprising: making transmission reservations in time via a control channel (e.g., col./line: 10/30-45); dividing time into cycles (e.g., col./line: 10/40-45); and scheduling transmission reservations (e.g., col./line: 9/44-52), packet transmissions and receptions (e.g., col./line: 11/25-45).

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Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10, 11, and 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tomioka US 5,452,115 A (Tomioka).

Re claims 10 and 11, Tomioka does not disclose

further including setting the optical switch and the transmit/receive switch to a cross state to put the transmit/receive data packet on the ring network. However, it would have been obvious to one of ordinary skill in the art at the time of invention that cross connect switches work in a bar or cross state to transmit traffic. This use of switches is notoriously well known in the art.

Re claims 13-17, Tomioka does not disclose the exact timing relationships to transmission and reception of packets as claimed. Tomioka does disclose timing (e.g., col./line: 13/55-67). However, it would have been obvious to one of ordinary skill in the art at the time of invention to adjust transmission and reception of packets some number of cycles in the future to ensure first that the time slot is available for transmission and second to ensure that a received packet is the correct one that is being awaited.

Allowable Subject Matter

6. Claims 2, 3, 8, and 9 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sabry et al. US 5,760,935 (Sabry) disclosed inter-network communication with time and wavelengths. Nakata US 5500857A (Nakata) disclosed inter-nodal communication with WDM and time-slots. Van As et al. US 5,764,392 A (Van As) disclosed an access control system for multi-channel transmission rings. Mossberg et al. US 6,292,282 B1 (Mossberg) disclosed a time-wavelength multiple access system. Lahat et al. US 6,466,343 B1 (Lahat) disclosed assigning wavelengths in a WDM system. Fatehi et al. US 6,694,100 B1 (Fatehi) disclosed a space TDM multiple access optical transmission system. Ofek US 6,674,754 B1 (Ofek) disclosed a combined WDM/TDM system. Barry et al. US 6,538,777 B1 (Barry) disclosed allocating wavelengths to a path. Fatehi et al. US 6,535,313 B1 (Fatehi) disclosed a dynamically assigned wavelength system. Wright et al. US 6,411,410 B1 (Wright) disclosed a TDM signal over a WDM ONU network.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David C. Payne whose telephone number is (703) 306-0004. The examiner can normally be reached on M-F, 7a-4p.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (703) 305-4729. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Dcp


JASON CHAN
SUPERVISORY PATENT EXAMINER
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